

# IMAGEN OF Boulder County

Issue #2

February 2006

## GAO study on improving STEM programs

Researched by Tony Tafoya

I recently dusted off last year's government study by the General Accountability Office (GAO) on the ability of the United States to maintain its position as world leader in education programs in the science, technology, engineering, and mathematics (STEM) fields.

The 112 page report starts by stating that 13 federal agencies reported spending about \$2.8 billion in FY 2004 on 207 education programs designed to increase the number of students and programs in STEM fields. The leading agencies with close to one billion dollars each in funding were the National Institutes of Health with 51 programs and the National Science Foundation with 48 programs.

The summary states that the total number of students, graduates, and employees in STEM fields increased. But, the numbers and percentages of women, minorities, and international students varied. From 1994 to 2003, the number of international graduates continued to earn about one-third or more of the advanced degrees in three STEM fields.

In interviews with educators and other stakeholders, several factors were cited that influenced a student's decision about pursuing STEM careers. They said that "teacher quality at the kindergarten to 12th grades, the mathematics and science courses completed in high school, and a mentor, especially for women and minorities, influenced U.S. students' decisions about pursuing STEM courses and related jobs. The GAO study referenced the 2000 report of the Congressional Commission on the Advancement of Women and Minorities

in Science, Engineering and Technology Development, *Land of Plenty: Diversity as America's Competitive Edge in Science, Engineering, and Technology*. In their report the commission stated that "teacher effectiveness is the most important element in a good education. The commission also suggested that boosting teacher effectiveness can do more to improve education than any other single factor."

The GAO study also quoted students and university officials who "suggested that better preparation and mandatory courses in mathematics and science were needed for students during their kindergarten through 12th grade school years." They stated that by taking mandatory courses, students would gain a greater interest and depth of knowledge and be better prepared to take STEM courses. The key appears to be that early preparation and exposure to good teachers will predispose a student to take STEM classes and pursue a related career.

In order to get this simple message to educators, parents and students, more outreach, especially to women and minorities is needed. Outreach could include inviting students to work sites and encouraging hands-on activities to make science careers more relevant to their daily lives. Students could visit university campuses where a university could adopt a school and provide supplemental instruction and tutoring in STEM subjects. Because of budget restraints, university officials said

## GAO study on improving STEM programs (continued from page 1)

that “the federal government could enhance its role in STEM education by providing more effective leadership through developing and implementing a national agenda for STEM education and increasing federal funding for academic research.”

The GAO report concluded that “while the total numbers of STEM graduates have increased, some fields have experienced declines, especially at the master’s and doctoral levels.” These numbers however, do not reveal the whole story. The National Oceanic and Atmospheric Administration (NOAA) pointed out that “the numbers of students in biological sciences; earth, atmospheric and ocean sciences; engineering; and technology” had shown significant declines from 1994 to 2003.

Hispanic students increased 33 percent from 1995 to 2004, and showed an increase from 9 to 10 percent of all students in STEM fields. While this may sound like good news for the fastest growing minority group, it does not augur well for the future. African Americans during this same period increased 69 percent and went from 9 to 12 percent of all students in STEM fields. Asian/Pacific Islanders increased 19 percent and stayed at 7 percent of all students in STEM fields. American Indians increased 107 percent and went from 0 to 1 percent of all students in STEM fields.

So, what do we make of this GAO report? What should we as Image members be doing to ensure that the U.S. maintains its position as an innovator in the scientific and technology world? I believe that we as a group have more influence than we realize. We just have to believe that this is true and act on it.

Locally, members of Boulder County Image have lobbied to support the Spangler Elementary MESA (Mathematics, Engineering, Science Achievement) program in Longmont. They’ve had success in obtaining NOAA funds to support the Jump Start program.

This program provides mathematics, science and English instruction to students for three weeks prior to the start of the normal school year to give students a jump start on these academic subjects. Spangler Elementary has a student population that is about 85 percent Latino and has been on academic watch because of the low CSAP scores.

Image members are collaborating on a funding proposal by McREL, Denver KMGH Channel 7 TV, and UCAR to provide a “Weather in Schools” program that will use NOAA data and learning materials to impact elementary and middle school students in Colorado. If successful, it will be made available to other states where we will look to the Image regional directors to help identify and target schools.

I encourage each member of Image to get involved by first understanding the problem Latinos are having in our schools. It is very disheartening to constantly hear the xenophobic rhetoric against the number of Latinos in our schools and in our communities. My belief is that this is the very population that will one day be called upon to defend this country with their blood. Their numbers certainly will grow, but so will their loyalty, and their children will grow up to be as no other in defense of their country. What we need to do today is to find ways to ensure that this population does not fall behind in education. The GAO report points to early intervention, good teachers and outreach. We can all be teachers and mentors because an education really begins at home. We can spend more time helping with homework, talking with teachers and offering support. We can all use our professional positions in some way to help with outreach. A little help goes a long way and a kind word can make the day shine and last forever in the eyes of a young student.

**In Unity there is strength,  
communication and progress**

## **Publisher's Notes from Colorado, National Image and Around the Country**

- ◆ To View the Denver *Noticiero* online go to <http://eeo.boulder.noaa.gov>. Click on Employment.
- ◆ **May 14-21, - 2006 National Image Training Conference. Theme, *Education, Commitment and Leadership, Making a Difference in our Nation*.** To be held at the Hyatt Regency, N.W., 122 N. 2nd Avenue, Phoenix, AZ. For more information visit [www.nationalimageinc.org](http://www.nationalimageinc.org).
- ◆ Message from Joe Davalos, Director, Region VIII, National Image, Inc.:

Joe will attend the National Image Executive Board meeting on February 24th in Phoenix. He forwards each monthly issue of *Imagen* to the National Image executive board. He is in contact with Tony Montoya and is attempting to get the Pueblo chapter back on board. He has developed a contact from Cheyenne who is seeking interest in Image so that Joe can give a presentation to potential members in the Cheyenne area. Joe reports that new members for the Denver HUD Hispanic Employment Program were recently elected: Ramona Elizalde, Chair; Carla Martinez, Vice Chair; Yvonne Flores, Treasurer; and Elizabeth Torres, Secretary.

Joe asks that you remember Roni Autobee in your prayers. She had a stroke which resulted in having her left hand amputated. There will be a fund-raiser for Roni at the American GI Forum, 1717 Federal Blvd, Denver, CO on Sunday, February 26, 2006 from 1-4 p.m. Roni worked in Denver as a full time employee for National Image for a number of years.

### **LOCAL EVENTS IN BOULDER**

The next Boulder County Image membership meeting will be held in March. Becky wants members to support and attend the Black History Month activities taking place in February. The March meeting will be a pot luck lunch/meeting from 11:30 to 12:30. Please dust off your favorite recipe and when Becky finds a meeting room and selects a date, let her know what you will be bringing to the meeting.

BIG is sponsoring a Black History Month program on February 24th. Please make plans to attend starting at 11 a.m. in the DSRC.

REMINDER: Image still has an opening for the position of Secretary.

### **IMPORTANT INFORMATION**

DOE/Office for Civil Rights in Denver, CO has advertised two vacancies:

- Supervisory Equal Opportunity Specialist, GS-360-15, Full Time Permanent;
- Supervisory General Attorney, GS-905-15, Full Time Permanent.

Closing date is March 20, 2006.

Contact: Ike Gilbert 206.220.7813.

Please encourage applications for these vacancies in Denver.

The following are excerpts from *Don Quijote de la Mancha*, second part of the book, written in 1615, where Don Quijote is a caballero and not a hidalgo. In the first part of the book, published in 1605, Don Quijote is made fun of. In chapter III, he is armed and is considered a caballero.

### Capítulo XXXIII

#### De la sabrosa plática que la duquesa y sus doncillas pasaron con Sancho Panza, digna de que se lea y de que se note.

-Ahora que estamos solos, y que aquí no nos oye nadie, querría yo que el señor gobernador me asolviese ciertas dudas que tengo, nacidas de la historia que del gran don Quijote anda ya impresa; una de las cuales dudas es que, pues el buen Sancho nunca vio a Dulcinea, digo, a la señora Dulcinea del Toboso, ni le llevó la carta del señor don Quijote, porque se quedó en el libro de memoria en Sierra Morena, cómo se atrevió a fingir la respuesta, y aquello de que la halló ahechando trigo, siendo todo burla y mentira, y tan en daño de la buena opinión de la sin par Dulcinea, y todas que no vienen bien con la calidad y fidelidad de los buenos escuderos.

....

-De lo que el buen Sancho me ha contado me anda brincando un escrúpulo en el alma, y un cierto susurro llega a mis oídos, que me dice: "Pues don Quijote de la Mancha es loco, menguado y mente-cato, y Sancho Panza su escudero lo conoce, y, con todo eso, le sirve y le sigue y va atenido a las vanas promesas suyas, sin duda alguna debe de ser él más loco y tonto que su amo; y siendo esto así, como lo es, mal contado te será, señora duquesa, sin al tal Sancho Panza le das ínsula que gobierne; porque el que no sabe gobernarse a sí, ¿cómo sabrá gobernar a otros?"

....

Y si vuestra altanería no quisiere que se me dé el prometido gobierno, de menos me hizo Dios, y podría ser que el no dármele redundase en pro de mi conciencia; que maguera tonto, se me entiende aquel refrán de "por su mal le nacieron alas a la hormiga"; y aun podría ser que se fuese más aína Sancho escudero a cielo, que no Sancho gobernador. Tan buen pan hacen aquí como en Francia; y de noche todos

los gatos son pardos; y asaz de desdichada es la persona que a las dos de la tarde no se ha desayunado; y no hay estómago que sea un palmo mayor que otro; el cual que puede llenar, como suele decirse, de paja y de heno; y las avecitas del campo tienen a Dios por su proveedor y despensero; y más calientan cuatro varas de paño de Cuenca que otras cuatro de límiste de Segovia; y al dejar este mundo y meternos la tierra adentro, por tan estrecha senda va el príncipe como el jornalero, y no ocupa más pies de tierra el cuerpo del Papa que el del sacerdostán, aunque sea más alto el uno que el otro; que al entrar en el hoyo todos nos ajustamos y encogemos, o nos hacen ajustar y encoger, mal que nos pese y a buenas noches. Y torno a decir que si vuestra señoría no me quisiere dar la ínsula por tonto, yo sabré no dárseme nada por discreto; y yo he oído decir que detrás de la cruz está el diablo, y que no es oro todo lo que reluce, y que de entre los bueyes, arados y coyundas sacaron a labrador Wamba para ser rey de España, y de entre los brocados, pasatiempos y riquezas sacaron a Rodrigo para ser comido de culebras, si es que las trovas de los romances antiguos no mienten.

-Y ¡cómo que no mienten! – dijo a esta sazón doña Rodriguez la dueña, que era una de las escuchantes: que un romance hay que dice que metieron al rey Rodrigo, vivo vivo, en una tumba de sapos, culebras y lagartos, y que de allí a dos días dijo el rey desde dentro de la tumba, con voz doliente y baja:

Ya me comen, ya me comen

por do más pecado había;

y según esto, mucha razón tiene este señor en decir que quiere más ser más labrador que rey, si le han de comer sabandijas.

....

by Miguel de Cervantes Saavedra

## ***The Goals and Objectives of Boulder County Image***

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- A. To seek a broad development and expansion of employment opportunities for the aspirants among the Latino population.
- B. To assist and encourage the government services in providing the best possible circumstances for the recruitment, training, employment and advancement of Latinos.
- C. To encourage and actively support the promotion and advancement of Latinos already employed.
- D. To counter employment issues based on social, ethnic, religious, age and gender discrimination, direct or indirect.
- E. To analyze and determine the educational and professional needs of Latinos seeking entry and advancement in employment; and, whenever possible, provide appropriate training and counseling services to meet these needs – particularly among the youth.
- F. To establish and continually upgrade a broad basis of communications with Latino employees across the nation.
- G. To respond to the reasonable requests of non-members and groups whose problems, goals, and objectives are supportable within the By Laws of Boulder County Image.
- H. To enhance the promotion of ethnic pride, culture, and camaraderie through the organized and regular social gatherings which will serve to bind members together.
- I. To provide a non-partisan platform on major issues of local and national significance so that members may be better informed and may express their views.
- J. To expand the concept and objectives of National Image, Inc., to communities throughout the United States to provide maximum impact on the benefits derived from the pursuit of these goals and objectives as stated above.

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# **Key Committee Functions**

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The key functions performed by Boulder County Image officers and members of standing committees include: **Advocacy on Employment and Education Issues; Membership and Outreach; and Consultation.** The President of Boulder County Image will assign members on an ad hoc basis as the need arises. The following is a brief description of each function:

## **Advocacy on Employment and Education Issues**

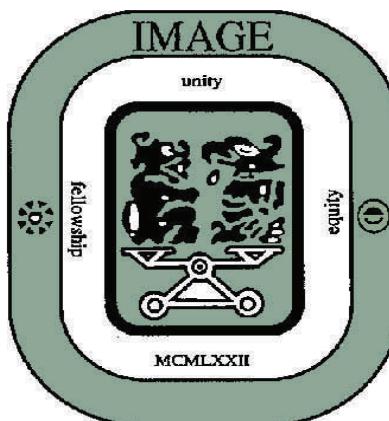
The advocacy function is performed when members take a pro-active role in seeing that a client's issue is addressed by the appropriate community, education or government organization. This function typically involves the following: Mediating an issue at the lowest level before it escalates; Negotiating issues on behalf of clients; Assisting local businesses with employee issues; Assisting students and parents with local school issues, e.g. fighting, drop out, and equal treatment policies; Educating the community on Latino issues; Researching legal information (not advice) on various employment topics; Accompanying clients (employees and applicants) and serving as their representative. Boulder County Image will monitor civil rights issues in the community and provide a community service by organizing Latinos and educating them on issues.

## **Membership and Outreach**

The membership committee is charged with an ongoing program of recruiting and retaining members. This committee coordinates a yearly membership drive for new members. The outreach function is performed by going out into the community to explain Image programs and communicating the assistance that can be provided. Typically, this function involves attending meetings and briefings, networking with agency representatives, providing orientation briefings to newcomers, attending training sessions and education workshops - both as participants and presenters.

## **Consultation**

Consultation services are typically provided to clients who are in need of explanations related to documents that need an interpretation and require follow up actions. Consultations are private.



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Boulder County Image  
#348  
637-B South Broadway  
Boulder, CO 80305  
Phone 303.497.6439

*IMAGEN* seeks to inform  
Latinos on employment, education  
and civil rights issues.

Editor: Tony Tafoya

**MISSION**

*National Image, Inc. was established in 1972, to address Latino concerns in employment, education, and civil rights. Boulder County Image is an affiliate of National Image, Inc. and operates in Colorado within Region VIII. Its mission is to work with federal, state, county and local government organizations and community members to improve the status of Latinos in focused mission areas.*

**BOARD OF DIRECTORS**  
**BOULDER COUNTY IMAGE**

**OFFICERS:**

The following were elected as interim officers at the first meeting on July 13, 2005. They will serve while the petition to affiliate with National Image, Inc. is being reviewed.

President - Becky Rios

1st Vice President - Richard Shields

2nd Vice President - Katy Stewart

Secretary - Vacant

Treasurer - Michelle Masias

**TASK FORCE CHAIRS/MEMBERS:**

The following have been appointed as chairs of the standing task forces. Members will be contacted to join one of these task forces.

Social/Cultural - Michelle Masias

Education - Richard Shields

Employment - Vacant

Civil Rights - Katy Stewart

**NATIONAL OFFICERS:**

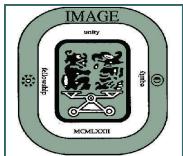
National President - John Griego

Region VIII Director - Joseph Davalos

Colorado State Director - Tony Montoya

Special Assistant Office of the Chairman -  
Ramón Montoya

## Membership Application Form



Boulder County Image  
#348  
637-B South Broadway  
Boulder CO 80305

### Applicant Information (please print or type)

Name	
Home Address	
City, State, Zip Code	
Employer Name	
Work Address	
City, State, Zip Code	
Telephone (business)	
Telephone (Home)	
Fax	
E-Mail	

### Membership Information #2-06

Type of Membership: New \_\_\_\_\_ Renewal \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

*(Membership dues are \$15.00 (\$8.00 for National dues, \$2.00 for State dues and \$5.00 for Chapter.)*

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